

DEPARTMENT OF DEFENSE

REGIONAL ENVIRONMENTAL COORDINATOR, REGION 9 937 N. Harbor Drive, Box 81 San Diego, California 92132-0058

5090 Ser N40JRR.cs/031 October 23, 2015

Dr. Meredith Williams
Department of Toxic Substances Control
California Environmental Protection Agency
1001 I Street, 12th Floor
Sacramento, CA 95814

Dear Dr. Williams:

Subject: SAFER CONSUMER PRODUCTS - DRAFT STAGE 1 ALTERNATIVE

ANALYSIS GUIDE - METHYLENE CHLORIDE-BASED PAINT

STRIPPERS

On behalf of the Department of Defense (DoD) Regional Environmental Coordinator (REC) in California, we appreciate this opportunity to comment on the Department of Toxic Substances Control's (DTSC) Draft Stage 1 Alternatives Analysis Guide (AA Guide). The DoD supports DTSC's goal of protecting California consumers from exposure to harmful chemicals contained in products placed in the stream of commerce.

As our December 3, 2014 letter to CalEPA Secretary Rodriguez regarding the military's limited use of methylene chloride-based paint strippers illustrates, we believe that manufacturers of selected military industrial products should not be required to conduct an onerous alternatives analysis as envisioned by this AA guide, since these products are not used by the common consumer. While page 19 of the AA guide briefly discusses Abridged AA's, this concept is not fully developed in this guide.

The military's limited continued need for Methylene Chloride/Dichloromethane (DCM) illustrates our concerns with the envisioned AA process, which is appropriate for products widely used in the stream of commerce, but places an undue burden on niche applications; such as military uses of DCM. As paragraph II below discusses, the European Union (EU)'s program provides exclusions for such limited industrial applications.

There should be a similar pathway in the AA process for a complete exclusion for products like these because: an informal/abridged AA has been performed resulting in the conclusion that there exists no current alternatives for DoD's mission essential need; there is no pathway of exposure to the general public; the use is governed by existing federal regulatory practices; and the DTSC alternatives analysis framework makes it difficult for unique military needs to be integrated into the overall process. The following paragraphs discuss these issues in more depth as they relate to the AA quide, using the military use of DCM as an example.

I. An informal/abridged AA has already been performed resulting in the conclusion that there is "no functionally acceptable and technically feasible alternative"

The DTSC has the regulatory authority and discretion within the outline of the Green Chemistry legislation and the Safer Consumer Products regulation to embrace a previously completed AA, recognize an alternative process AA, or allow for an abridged AA. See Title 22 CA Code of Regulations (CCR) \$69505.2(a)(2).

Over the last 20 years, the DoD has demonstrated its commitment to developing, testing, and implementing safer alternatives to DCM based paint stripping, including making significant capital investments to using Plastic Media Blasting (PMB) for paint removal of majority of aircraft and aircraft components; reducing the overall usage of DCM by 97% at Fleet Readiness Center Southwest (FRCSW). Director DTSC Lee acknowledged this fact in her May 4 letter that the Navy has already completed a "real-world application of alternatives assessment principles..." As a result of this systematic AA, the Navy concluded that there are a few remaining applications where DCM based paint stripper is still being used or may be used in the future because of mission criticality or new airframe maintenance requirements. These applications include wing attach lugs, arresting gear components, and landing gear components. PMB cannot be used for these applications because of the high potential for micro-cracks in high-strength steel parts to be easily masked by small PMB grit media which can prevent crack detection by subsequent Fluorescent Penetrant Inspection (FPI). The smallest undetected micro-crack under the stress, load, and tempo of military operations can lead to catastrophic failure including loss of life (pilot and crew, flight deck personnel, and people on the ground).

Many chemical stripping alternatives have been evaluated in the effort to eliminate DCM use on high-strength steel applications. Thus far, a safe and effective material has not been identified that meets all military specifications and requirements that will also not induce hydrogen embrittlement or cause corrosion. In both cases, these results are an unacceptable risk to flight safety in the harsh saltwater environment that the Navy and Marine Corps operates.

22 CCR § 69505.4 (b) provides that when a Responsible Entity (RE) determines a "functionally acceptable and technically feasible alternative is not available" they may prepare and submit an Abridged AA Report, in lieu of the Preliminary and Final AA Reports. DTSC has exercised sound public policy in providing for a streamlined AA process in its regulatory construct, however, DOD is at a distinct disadvantage at this stage in the process because the legal duty is placed on the RE to make this determination rather than the end-user, DoD as in the case of DCM. Please see Due Process/Standing concerns, more fully discussed below. Having acknowledged that DoD has already performed a "real-world application of alternatives assessment principles," we urge DTSC to exercise regulatory discretion to carve out a pathway in the AA guide to exempt specific military products and applications; such as the use of DCM which is essential to military aviation safety. 22 CCR § 69505.7 vests in DTSC the authority to determine how much information is required to support an abridged AA. DTSC could feasibly conclude that DoD has met the threshold required for the analysis and is at the point of concluding there are "no functionally acceptable and technically feasible alternatives."

I. There is no potential for public exposure for specific military uses

Civilian DoD employees working with the limited remaining applications of DCM are actively monitored by industrial hygiene air sampling to assess employee exposure to airborne organic vapors during routine processes which utilize DCM. Additionally,

annual Industrial Hygiene Surveys are conducted to identify workplace hazards, and ensure that they are mitigated to prevent employee exposure. Employees are protected from hazards by the use of engineering controls including ventilation and tank covers, as well as personal protective equipment such as gloves, face shields and air purifying respirators. For example, the Naval Occupational Safety and Health Office conducts routine monitoring and training to ensure employees are trained in the proper use of hazardous materials. The Navy also requires routine medical surveillance conducted by a physician with expertise in industrial medicine.

II. Extensive Federal Regulatory Framework

While a general consumer's purchase and use of DCM would be appropriately evaluated in the analysis described in DTSC's Draft AA Guide, the DoD's use of DCM in a military facility for a limited use would be inappropriately placed. As a federal agency, the DoD complies with a complex and robust regulatory framework already in place under the federal Occupational Safety and Health Act, the Clean Air Act, as well as the Toxic Substances Control Act (TSCA). OSHA has regulated occupational exposure of DCM for many years and provides for permissible exposures limits, exposure monitoring, training and labeling to ensure workers are protected from adverse health effects.

The European Union (EU) also has parallel legislation that was enacted with the aim of ensuring a high level of protection of human health and the environment from the risks that can be posed by chemicals. The Consultation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)¹ regulation was enacted in 2006 and is analogous to the Safer Consumer Products regulations. REACH required the assessment and management of the risks posed by chemicals and called for manufacturers to provide appropriate safety information to their users. Additionally, the regulation promoted the development of alternative methods for the assessment of hazards of substances.

REGULATION (EC) No 1907/2006 OF 18 December 2006

Following a period of analysis, in 2010, the EU promulgated specific regulations restricting the use of Dichloromethane (DCM).² The regulation specifically carves out and allows for "industrial use" in a "facility used for paint stripping activities" as long as specific health and safety protections are complied with.³ These protections, such as effective ventilation, safe handling and disposal, use of protective gear and adequate training are similar to those found in current OSHA requirements discussed above. A military facility used for aviation paint stripping would fall under this allowed category of use.

III. DTSC Process Presents Due Process/Standing Concerns

To the extent that DTSC does not give DoD relief, we are at a significant disadvantage in that by regulation, defined "responsible entities" (RE) prepare the alternatives analysis (AA) upon which regulatory response decisions will be made. CCR § 69501.1 (a) (60) defines RE as (A) Manufacturer, (B) Importer, (C) Assembler, or (D) Retailer, none of which bring in DoD as an end user into the preparation of the primary substantive document upon which DTSC makes a decision to potentially prohibit the use, sale, distribution of a Priority Product.

Under federal law, DoD is prohibited from engaging in what is termed as "grass roots" lobbying, which would be a situation where DOD is making its impacts analysis arguments to a third party, who then in turn have the responsibility to articulate those impacts to the decision maker, DTSC. This places DoD one step removed from engaging the state official making the decision, and limits the effectiveness of this advocacy for an issue that has the potential to impact flight safety and pilots and passengers lives.

While we recognize we have the authority to submit comments to DTSC throughout the regulatory process, we have tremendous concerns to the extent that DTSC decides not to carve out military uses of DCM directly, but rather directs us to engage in the AA through responsible entities.

²COMMISSION REGULATION (EU) No 276/2010 of 31 March 2010

³ COMMISSION REGULATION (EU) No 276/2010 of 31 March 2010, sec. 1(a)(ii)

For these reasons DoD requests that DTSC specifically provide a pathway in the AA guide to exempt specific military products and applications; such as the use of DCM which is essential to military aviation safety.

My point of contact for this is Michael Huber who can be reached at (619)532-2303.

Sincerely,

C. L. STATHOS

C. L. STATHOS

By direction

Enclosures: 1. DoD REC 9 letter of December 3, 2014

Department of Toxic Substances Control letter of May 4, 2015

Copy to: Karl Palmer, California Department of Toxic Substances
Control

Jim Bohon, CalEPA Gordon Burns, CalEPA

Wade Crowfoot, Office of Governor Brown



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937 N. Harbor Drive, Box 81 San Diego, California 92132-0058

> 5090 Ser N40JRR.cs/050 December 3, 2014

The Honorable Matthew Rodriguez, Secretary California Environmental Protection Agency 1001 I Street
Sacramento, CA 95814

Dear Secretary Rodriquez:

Subject: SAFER CONSUMER PRODUCTS - PRIORITY PRODUCTS LIST METHYLENE CHLORIDE-BASED PAINT STRIPPERS

We wish to thank your staff, Mr. Karl Palmer and Mr. Jim Bohon, for taking time out of their busy schedule to tour the Navy's Fleet Readiness Center Southwest (FRCSW) on Coronado on October 27, 2014. The purpose of that visit was for FRCSW to brief and apprise DTSC and CalEPA of the military's significant efforts to reduce its use of Methylene Chloride since the mid 1990's. Further, we wanted to show first-hand the very small number of remaining flight safety critical applications.

On behalf of the military services in California, we are following up that tour with this specific written request to exempt military aviation applications from the Priority Products (PP) list in DTSC's upcoming rule making based on the information provided herein.

During the tour, FRCSW demonstrated its 20 year commitment to developing, testing, and implementing safer alternatives to Methylene Chloride based paint stripping, including making significant capital investments with the Navy leading the way to using Plastic Media Blasting (PMB) for paint removal on the majority of military aircraft and aircraft components. Most recently, FRCSW has transitioned to a safer chemical paint stripper for paint removal of E-2 Rotodomes and similar components made of aluminum and fiberglass. These efforts have reduced FRCSW's Methylene Chloride use by 97%.

There are a few remaining applications at FRCSW where Methylene Chloride based paint stripper is still being used because of mission and safety criticality including wing attach lugs, arresting gear components, and landing gear components. PMB cannot be used for these applications because of the high potential for micro-cracks in high-strength steel parts to be easily masked by small PMB grit media which can prevent crack detection by subsequent Fluorescent Penetrant Inspection (FPI). The smallest undetected micro-crack under the stress, load, and tempo of military operations can lead to catastrophic failure including loss of life (pilot and crew, flight deck personnel, and people on the ground).

Many chemical stripping alternatives have been evaluated in the effort to eliminate Methylene Chloride use on high-strength steel applications. Thus far, a safe and effective material has not been identified that meets all military specifications and requirements that will also not induce hydrogen embrittlement or cause corrosion. In both cases, these flaws are an unacceptable risk to flight safety in the harsh saltwater environment that the Navy and Marine Corps operates.

We have verified that other military services and the California National Guard have made similar efforts to reduce methylene chloride paint stripper use and face similar safety operational challenges for their remaining applications of methylene chloride paint stripper.

I. DTSC Regulatory Structure

The Department of Toxics Substance Control (DTSC) has the regulatory authority and discretion within the outline of the Green Chemistry legislation and the Safer Consumer products regulation to focus and limit the list of PP.

We believe review of the following elements demonstrate and support the military's limited continued need for Methylene Chloride and provide the basis for DTSC to determine that excluding this limited use from the PP list is justified for the following reasons: there exists no current alternatives, the use is governed by existing regulatory practices, and the DTSC process makes it difficult for unique military needs to be integrated into the overall process.

CCR §69503.5 provides the regulatory framework for the PP list citing CCR §§ 69503.2 and 68503.3.

CR § 69503.2 (a) states that any products-chemical combination listed as a PP must meet both of the following criteria:

- 1. Potential public ... exposure to the Candidate Chemical (CC)
- 2. Potential for the exposure to contribute to or cause significant or widespread adverse impacts; adverse impacts are outlined below.

II. No adverse impacts finding for military uses to support including in the PP list:

In identifying and revising the CC List, DTSC is required to perform an "adverse impacts" analysis looking at the hazardous traits and/or environmental or toxicological endpoints, the aggregate effects, cumulative effects, physicochemical properties, environmental fate, human population adversely impacted, and potential to degrade. [CCR §69502.2(b); see also CCR § 69503.3]

We can show that military uses are so narrowly confined that military applications of Methylene Chloride do not rise to the level of an adverse impact necessitating inclusion in the PP list at this time. Civilian DoD employees working with the limited remaining applications of methylene chloride are actively monitored by conducting industrial hygiene air sampling to assess employee exposure to airborne organic vapors during routine processes which utilize methylene chloride. Additionally, annual Industrial Hygiene Surveys are conducted to identify workplace hazards, and ensure that they are mitigated to prevent employee exposure, and with routine medical surveillance conducted by a military physician with expertise in industrial medicine. Employees are protected from hazards by the use of engineering controls including ventilation and tank covers, as well as personal protective equipment such as gloves, face shields and air purifying respirators. Additionally, the Naval Occupational Safety and Health Office conducts routine monitoring and training to ensure employees are trained in the proper use of hazardous materials. [CCR § 69503.3(b)(4)(E), CCR § 69503.3(b)(4)(G)]

III. Due process/standing concerns if PP does not carve out military uses from the PP at this stage in the regulatory development:

To the extent that DTSC does not give DoD relief during the PP listing stage, we are at a significant disadvantage in that by regulation, defined "responsible entities" (RE) prepare the alternatives analysis (AA) upon which regulatory response decisions will be made. CCR § 69501.1 (a) (60) defines RE as (A) Manufacturer, (B) Importer, (C) Assembler, or (D) Retailer, none of which bring in DoD as an end user into the preparation of the primary substantive document upon which DTSC makes a decision to potentially prohibit the use, sale, distribution of PP.

While we recognize we have the authority to submit comments to DTSC on the RE's AA, we have tremendous concerns to the extent that DTSC decides not to carve out military uses from the Methylene Chloride PP listing, but rather directs us to engage in the AA.

Under federal law, DoD is prohibited from engaging in what is termed as "grass roots" lobbying, which would be a situation where DOD is making its impacts analysis arguments to a third party (the RE), who then in turn have the responsibility to articulate those impacts to the decision maker (DTSC). This places DoD one step removed from engaging the state official making the decision, and limits the effectiveness of this advocacy for an issue that has the potential to impact flight safety and pilots and passengers lives. DTSC has the ability to avoid this scenario by making a public policy decision at the PP listing stage to carve out military aviation applications.

IV. Unique military need requires certainty and action now:
While it is true that the DOD can petition DTSC to remove a CC
from the PP list pursuant to CCC § 69504, the regulations
require that this petition not occur until three years after the
listing which would unnecessarily delay this action in a manner
that would impact the military mission.

It is clear that it is at the "listing" decision point; that DTSC is required to analyze whether there are "readily available safer alternatives that are functionally acceptable, technically feasible, and economically feasible." [CCR § 69503.2(b)(3)]. While it might seem from a public policy perspective to be

acceptable to postpone this decision until the AA stage, there is a compelling argument that not only is there the legal authority for DTSC to carve out military aviation applications at the PP listing stage, but there is enough information to take such action at this time. For these reasons the military requests that DTSC specifically exclude military aviation applications of Methylene Chloride in the rule making that lists Methylene Chloride as a PP.

My point of contact for this is Michael Huber who can be reached at (619)532-2303.

Sincerely,

C. L. STATHOS
By direction

Copy to: Wade Crowfoot, Office of Governor Brown

Gordon Burns, CalEPA Jim Bohon, CalEPA

Karl Palmer, California Department of Toxic Substances

Control





Environmental Protection

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Barbara A. Lee, Director 1001 "I" Street P.O. Box 806 Sacramento, California 95812-0806

May 4, 2015

Mr. C.L. Stathos Department of Defense Regional Environmental Coordinator, Region 9 937 North Harbor Drive, Box 81 San Diego, California 92132-0058

SAFER CONSUMER PRODUCTS - PRIORITY PRODUCT LISTING FOR METHYLENE CHLORIDE-BASED PAINT STRIPPERS

Dear Mr. Stathos:

Thank you for your letter dated December 3, 2014 to Matthew Rodriquez, Secretary of the California Environmental Protection Agency. Secretary Rodriquez forwarded your letter to me and asked that I respond.

In your letter you note that the Navy's Fleet Readiness Center Southwest (FRCSW) has undertaken a successful 20-year effort to significantly reduce the use of methylene chloride-based paint strippers. Despite this achievement, there are still certain specialized paint stripping applications for which FRCSW has been unable to identify alternatives that meet critical performance and safety specifications. You express concern about the Department of Toxic Substances Control's (DTSC) decision to identify paint strippers with methylene chloride as a Priority Product with a Chemical of Concern under its Safer Consumer Products regulations, and ask that we exempt military aviation applications of the product from the Priority Product listing.

DTSC commends FRCSW for its ongoing efforts to reduce its use of methylene chloride. While we recognize the importance of the remaining uses for methylene chloride-based paint strippers in the Department of Defense's (DoD) operations, DTSC does not see a way to carve out these uses from our proposed Priority Product listing. The listing must identify a product-chemical combination in such a manner that the manufacturer of the product would know it is being regulated. For certain products it is possible that we could specify specific formulations of a product to be included or excluded from the listing. However, the listing must clearly identify products in the market. It is our understanding that the methylene chloride FRCSW uses is not a

Mr. C.L. Stathos May 4, 2015 Page 2

unique formulation. Unless DoD is buying a type of methylene chloride-based stripper that is used exclusively for the purposes you discuss in your letter, we do not see a way in which we could craft the Priority Product listing to exclude the product you are currently using. Thus it's not possible to write in such an exemption since it's not a unique product.

DTSC believes that a more appropriate time to evaluate the suitability of alternatives for specialized applications of a general-purpose Priority Product is during Alternative Analysis (AA) development and the subsequent public process for evaluating possible regulatory responses. It is important to remember that naming a product as a Priority Product has no immediate impact on its sale or use, even after the Initial Priority Product List is codified in regulations. I am confident that the public, deliberative process for identifying alternatives and regulatory responses will consider and address the safety and performance concerns you raise.

As you are aware, once a Priority Product is identified, manufacturers are required to perform an AA within a specified period of time to ascertain if there are ways to make the product safer. The outcome of the AA process is not predetermined and may differ among manufacturers of the same type of products. For example, one manufacturer may find a way to reformulate its product to reduce or eliminate use of methylene chloride while still performing acceptably while another manufacturer of a similar product may conclude that there is no safer alternative that meets its specific product performance requirements.

Importantly, the AA process accommodates different specific end user requirements. Thus, FRCSW's critical and unique requirements should be considered and addressed by the entity performing the AA. The Navy has already demonstrated feasibility and implemented alternatives to methylene chloride-based paint strippers for many applications. Concurrently FRCSW has identified some applications where you believe no current alternative exists. The Navy's real-world application of alternatives assessment principles provides strong data and information that would support a well-documented and supportable AA.

I understand your concern that at some point in the future, DTSC could restrict or prohibit the use or sale of methylene chloride-based paint strippers as part of a regulatory response. While it is possible that a regulatory response could restrict the sale of this product in some way, any such decision is years away. As I noted earlier, DTSC's regulatory responses are not determined when we identify a priority product. Rather, they depend entirely on the findings of AAs submitted by manufacturers. It is also important to remember that regulatory responses are specific to each submitted AA. Even when DTSC has identified a proposed regulatory response, we will follow a formal administrative process that includes a 45-day public comment period and at least

Mr. C.L. Stathos May 4, 2015 Page 3

one public workshop before imposing the response. These requirements are spelled out in section 69506.1 of title 22 of the California Code of Regulations.

You raise a concern in your letter that, by engaging in the public processes around the AA and regulatory responses, FCRSW could come into conflict with the federal prohibition on "grass roots" lobbying by DoD. I am unclear as to the basis for your concern. How would participating in a discussion of the adequacy of a manufacturer's AA or DTSC's proposed regulatory responses be any more lobbying than your previous participation in our public workshops on the Initial Priority Product List and the Priority Products Work Plan? While DTSC is unable to accommodate your request for a specific exemption for military aviation applications, DoD can and should engage in the process in order to ensure that your legitimate concerns are heard and considered. I am confident that if we choose to pursue a regulatory response we will take into account the critical functional requirements of the Navy and others.

We will soon be moving into formal rulemaking for listing methylene chloride in paint strippers as a Priority Product. I encourage your continued participation in this important process.

I hope this letter clarifies the Safer Consumer Product Regulation and allays your concerns regarding military applications of methylene chloride-based paint strippers. If you have any additional concerns or questions, please feel free to contact Dr. Meredith Williams, Deputy Director of DTSC's Safer Products and Workplaces Program at Meredith Williams@dtsc.ca.gov or (916) 322-3804.

Sincerely.

Barbara A. Lee

Director

cc: See next page.

Mr. C.L. Stathos May 4, 2015 Page 4

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